ReticleSense®
Airborne Particle Sensor (APSR)

APSR

Improve equipment set-up and long term yields by wirelessly monitoring airborne particles in real-time.

Quickly monitors, identifies and enables troubleshooting of airborne particles down to 0.15um within semiconductor process equipment and automated material handling systems.

Easily identifies when and where the particles originate and measures the effectiveness of cleaning adjustments and repairs in real time.

Speed equipment qualification with wireless measurements.

- Collect and display particle data wirelessly using the APSR and Particle View™ software for real-time equipment diagnostics.
- Compare past to present as well as one tool to another with recorded particle data.
- Save time by swiftly locating contamination sources with the APSR data and see the effect of cleanings, adjustments and repairs in real time.

Shorten equipment maintenance cycles with reticle-like form factor.

- Detect particles in real-time without opening the tool so you don't need to expose process areas to the environment.
- APSR goes where reticles go to find the place where particles contaminate reticles.
- Once the location of particles is identified, tools may be selectively cleaned. Open only the dirty portion, keep the clean areas clean.

Lower equipment expenses with objective and reproducible data.

- Raise your first-pass monitor reticle success, reduce your qualification expense and increase availability with APSR.
- Receive early warning for impending equipment failures and optimize your preventative maintenance plans.
- Establish a baseline from known clean tool, then cycle APSR through a candidate tool before committing monitor reticles.

Semiconductor fabs and OEMs worldwide value the accuracy, precision and versatility of the WaferSense APSR – The most efficient and effective wireless measurement device for airborne particles.

Save Time. Save Expense. Improve Yields.

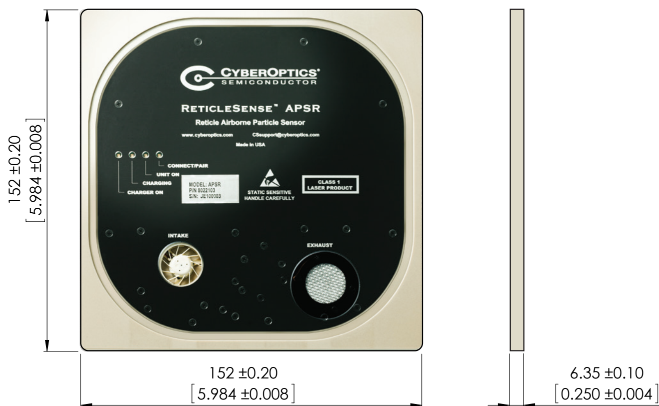
CYBEROPTICS®

Features*

Wireless, reticle-shaped and battery-powered	Available in 6 inch Reticle form factor
Easy-to-use software	ParticleView and ParticleReview software included
	ParticleView: Displays real-time numeric and visual feedback, cumulative or differential counting modes and density or frequency modes
	ParticleReview: Replays log file data for review and analysis
Highly accurate	Measures particles greater than 0.14μm
	Size channels: Reports particles in 0.1μm and 0.5μm bin sizes (consult factory for other bin sizes)
Durable housing	Glass filled PEEK, polycarbonate
Weight	312g (+/- 15g)
Airflow	0.07CFM (2L/min) @ 1 atmosphere
Operating pressure	0.4 to 1.6 atmosphere
Operating internal temperature	15 deg C to 45 deg C non-condensing
Battery-operation	>1 hour per charge. Inductive wireless charging and handsfree operation.
WaferSense Link	Bluetooth, Class 1, 2.4 GHz
Operating Systems	Windows 7, 8, 10, XP, Vista
Product components	Particle measurement device, charging clean case, carrying suitcase, USB communications link module and application software
Calibration	Factory recalibration recommended annually

*Specifications subject to change without notice

Dimensions



Dimensions, chamfers, and squareness conform to SEMI standard for 6 inch square reticles.

ParticleView™

Real-time data.

Contact CyberOptics today for your complimentary on-tool demonstration
+1 800.366.9131 or +1 763.542.5000 | CSsales@cyberoptics.com | www.cyberoptics.com

Copyright © 2017. CyberOptics Corporation. All rights reserved. 8022166 Rev D